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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,105	11/17/2003	Souji Kihira	117797	9764

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EXAMINER

MAYO III, WILLIAM H

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 12/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/713,105

Applicant(s)

KIHIRA, SOUJI

Examiner

William H. Mayo III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the claim limitations of claim 1 which recites that the metal pipe is "substantially rigid" is not supported by the original disclosure and therefore constitutes new matter. The applicant is required to cancel the newly submitted claim limitations.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Own Admission of Prior Art (herein referred to as AOAPA) in view of

Morgan et al (Pat Num 5,473,117, herein referred to as Morgan). AOAPA discloses under the heading "Description of the Related Art" that shielded wire harnesses are commonly utilized for connecting machines such as an inverter unit and a motor in an electrical vehicle (Page 1, lines 9-11 of applicant's specification). Specifically, with respect to claim 1, AOAPA discloses that the well known shielded wire harness comprises a plurality of wires (Page 1, lines 11-18); a plurality of wire-side terminals respectively connected to an end portions of the wires (Page 1, lines 11-18), and configured to be connected respective terminals disposed within a shield case of an equipment (Page 1, lines 11-18).

However, AOAPA doesn't necessarily disclose the shielding member formed of a tube shape and configured to enclose the plurality of wires collectively and to be connected to the shield case, wherein the shielding member comprises a main shield portion made of a substantially rigid metal pipe, and a sub-shield portion formed shorter than the main shield portion to be configured and deformable (claim 1), nor the sub-shield portion comprises a braided member formed in a tube shape by braided metal thin lines (claim 2), nor the shielding member further comprising a connecting pipe made of metal and connected to the main shield portion; and a shield shell having a conductive characteristic and configured be connected the shield case, wherein one end portion of the braided member is connected to the connecting pipe, and the other end portion of the braided member being connected to the shield shell (claim 3), nor the shielding means comprising a drain hole (claim 5), nor the drain hole being formed at

the lower most position of the wiring route of the shielded wire harness and opened in substantially downward direction (claim 6).

Morgan teaches a method and apparatus (Figs 1-7) for flexibly shielding the end of a large cable from EMI (Col 1, lines 5-10) such that the method and apparatus eliminate or reduces disadvantages and problems associated with prior apparatuses for shielding large cables (Col 1, lines 50-55). Specifically, with respect to claim 1, Morgan teaches a shielding member (24) formed of a tube shape and configured to enclose the plurality of wires (18) collectively and to be connected to the shield case (52), wherein the shielding member (24) comprises a main shield portion made of a metal pipe (14), and a sub-shield portion (26) formed shorter than the main shield portion (14, Fig 8) and configured to be configured and deformable (Col 4, lines 3-8). With respect to claim 2, Morgan teaches that the sub-shield portion (26) comprises a braided member formed in a tube shape by braided metal thin lines (Col 3, lines 53-55). With respect to claim 3, Morgan teaches that the shielding member (24) further comprising a connecting pipe (14) made of metal and connected to the main shield portion (16, Col 1, lines 4-10); and a shield shell (36) having a conductive characteristic (Col 3, lines 53-55) and configured be connected the shield case (52, Fig 8), wherein one end portion of the braided member (26) is connected to the connecting pipe (14), and the other end portion of the braided member (26) being connected to the shield shell (36). With respect to claim 5, Morgan teaches that the shielding means (24) comprising a drain hole (40, Col 9-16). With respect to claim 6, Morgan teaches that the drain hole (40) is formed at the lower

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most position of the wiring route of the shielded wire harness (Figs 4-5) and opened in substantially downward direction (Col 4, lines 9-25).

With respect to claims 1-3 and 5-6, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the wiring harness of AOAPA to comprise the shield configuration as taught by Morgan because Morgan teaches that such a configuration provides flexibly shielding the end of a large cable from EMI (Col 1, lines 5-10) such that the method and apparatus eliminate or reduce disadvantages and problems associated with prior apparatuses for shielding large cables (Col 1, lines 50-55).

With respect to claim 1, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the main shield portion of modified AOAPA to comprise a metallic sheet forming the shield, which inherently would be substantially rigid because metallic sheets forming shields are commonly utilized as shield, rather than braided shields which cannot shield the interior components entirely, because of their ability to cover the interior components entirely and therefore prevent external noise such as EMI and RFI from interfering with the interior components.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Own Admission of Prior Art (herein referred to as AOAPA) in view of Morgan (Pat Num 5,473,117), as applied to claim 1 above (herein referred to as modified AOAPA), further in view of Lawson et al (Pat Num 3,280,246, herein referred to as Lawson). Modified AOAPA discloses under the heading "Description of the Related Art" that shielded wire harnesses are commonly utilized for connecting machines such as an

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inverter unit and a motor in an electrical vehicle (Page 1, lines 9-11 of applicant's specification).

However, modified AOAPA doesn't necessarily disclose the connecting pipe being plated (claim 4).

Lawson teaches a plurality of wires (Figs 1-8) being shielded against high frequency currents by means of a braided metallic covering (Col 1, lines 9-14) that eliminates the disadvantages of the prior art shields (Col 1, lines 37-40). Specifically, with respect to claim 4, Lawson teaches a shielding device (10) surrounding a plurality of wires (12), wherein the shielding device (10) comprises an outer annular tube (18), that may be made of tinned brass (Col 2, lines 65-71).

With respect to claim 4, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the shielding device of modified AOAPA to comprise the tube being made of tinned brass as taught by Lawson because Lawson teaches that such a configuration provides shielding against high frequency currents by means of a braided metallic covering (Col 1, lines 9-14) that eliminates the disadvantages of the prior art shields (Col 1, lines 37-40) and since it has been held to be within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Response to Arguments

6. Applicant's arguments filed October 8, 2004 have been fully considered but they are not persuasive. The applicant argues the following:

- A) Morgan doesn't teach the use of a metallic pipe because a thin foil outer shield cannot be considered a pipe.

With respect to argument A, the examiner respectfully traverses. Firstly, it must be stated that the examiner is required to give the claims the broadest reasonable interpretation. Specifically, MPEP 2111 states:

During patent examination, the pending claims must be "given *>their< broadest reasonable interpretation consistent with the specification." > In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000).< Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

Given the broadest interpretation of the term metallic pipe, the Webster's Dictionary defines the term pipe as

"Pipe-a hollow cylinder or tube of material".

Morgan clearly teaches a metallic sheath that is formed as hollow cylinder or tube of material which is made of a metallic material and therefore clearly discloses a metallic pipe. In light of the above comments, the examiner respectfully submits that the 35 USC 103(a) rejection of claims 1-6 is proper and just.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are Mizutani (Pat Num 6,781,059), Kuboshima et al (Pat Num 6,815,610), Fukushima et al (Pat Num 6,583,352), Kanagawa (Pat Num 6,524,121), Endo et al (Pat Num 6,042,396), Miyazaki et al (Pat Num 5,691,506), Hill (Pat Num 3,990,765), and Procter et al (Pat Num 4,896,000), all of which disclose shielding devices for wiring.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Communication

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William H. Mayo III
Primary Examiner
Art Unit 2831

WHM III